Factors related to college students' decisions to report sexual assault

by

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Abstract

Sexual assault is a serious problem on college campuses. The purpose of this study was to examine factors that are associated with sexual assault survivors reporting their assault. The sample included 266 individuals who had experienced a sexual assault since enrolling in their university. A multinomial regression was tested to predict the odds of whether or not the survivor made a formal report of the assault, an informal report to friends or family members, or if the survivor told no one about the assault. The type of assault, the survivor's relationship to the perpetrator, whether or not the survivor was drinking alcohol at the time of the assault, whether or not the survivor received sexual assault training, and the survivor's perception of the overall campus climate were added as predictors of the odds of making a report. The participant's belief that the university would handle the assault appropriately was used as a moderator of those associations. Race/ethnicity, gender, and sexual orientation were used as control variables. It was found that if the survivor had received sexual assault training, if the assault was vaginal or anal sex, and if the survivor had a positive perception of the overall campus climate, they were more likely to formally report the assault. If the perpetrator was an acquaintance, friend, or dating partner, survivors were less likely to formally report the assault. If the survivor was a racial or ethnic minority, they were less likely to formally or informally report the assault. Our findings suggest that there are ways universities can aid in survivors reporting their sexual assault through education, training, and improving the overall campus climate.

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Chapter 1 - Introduction

Sexual assault on college campuses is a significant problem. The Association of American Universities' Campus Climate Survey on Sexual Assault and Sexual Misconduct found that 23.1% of undergraduate females and 5.4% of undergraduate males experienced non-consensual sexual contact by force or incapacitation since enrolling in their universities (Cantor, Fisher, Chinball, Townsend, Lee, Bruce, & Thomas, 2015). This is problematic because the impacts of sexual assault include, but are not limited to, intense fear, anxiety, guilt, low self-esteem, post-traumatic stress disorder, depression, hopelessness, sleep disturbances, physical injuries, weight change, difficulties with interpersonal relationships, poor work or academic performance, and suicidal ideation (Boyd, 2011; Change, Lian, Yu, Qu, Zhang, Jia, Hu, Li, Wu, & Hirsch, 2015; Resnick, Acierno, & Kilpatrick, 1997). To make matters worse, only one-fourth of survivors of forced penetration reported the incident, and only seven percent of survivors who experienced other forms of sexual assault reported the incident (Cantor et al., 2015).

Researchers have examined reasons sexual assault survivors give for not reporting the assault to police. Reasons for not reporting to police include fear of retaliation by the offender, self-blame, fear that they will be blamed by the police for the assault, not wanting others to know about the assault, feeling that the assault was not a big enough deal to report, lacking evidence to prove that the assault occurred, and believing that the police would not help them even if they did report the sexual assault (Carbone-Lopez, Slocum, & Kruttschnitt, 2015; Cohn, Zinzow, Resnick, & Kilpatrick, 2013; Fisher, Daigle, Cullen, & Turner, 2003; Jones, Alexander, Wynn, Rossman, & Dunnuck, 2009; Thompson, Sitterle, Clay, & Kingree, 2007).

Most research examining sexual assault survivors' decision on whether or not they report the sexual assault to the police has been qualitative (Carbone-Lopez et al., 2015; Taylor &

Norma, 2012). Studies examining sexual assault survivors' decision to report the assault to the police that were not qualitative have used correlational analyses (Cohn, et al., 2013; Ullman & Filipas, 2001), *t*-tests, odds ratios, chi-squares (Jones et al., 2009), and simple regressions (Chon, 2014; DuMont, Miller, & Myhr, 2003; James & Lee, 2015; McGregor, Wiebe, Marion, & Livingstone, 2000; Thompson et al., 2007; Wolitzsky-Taylor, Resnick, Amstadter, McCauley, Ruggiero, & Kilpatrick, 2011). This review of literature suggests that there is a need for more research to be done to further examine sexual assault survivors' decision to report the assault. Although there is a body of research that examines why sexual assault survivors do not report to law enforcement officials, little research has sought to examine why survivors of sexual assault do not report to universities.

In fact, only one study was identified. Moore and Baker (2016) gave college students (who were not sexual assault survivors) a list of scenarios and asked them whether or not they would report the sexual assault to the police or to the university. Although this study examined the survivor's relationship to the perpetrator, if the assault happened on-campus or off-campus, demographic variables, and if emotions about the assault impacted whether or not the students believed that they would report the sexual assault to the police or the university, this study did not ask actual survivors of sexual assault these questions. Research that specifically seeks responses from survivors of sexual assault regarding factors associated with their decision regarding reporting sexual assault to the university is needed in order to gain a more comprehensive understanding of factors that contribute to sexual assault survivors reporting their assault to university officials

The Campus Sexual Violence Elimination Act (Campus SaVE) requires universities to provide information about counseling services, victim advocacy services, legal assistance, and

other resources available to the survivor when they report the sexual assault to the university. It is important to explore reporting behaviors on college campuses because if a sexual assault is reported to a university, the survivor can access these services. Sinozich and Langton (2014) found that only 16% of college-aged female sexual assault survivors received support from victim service agencies. Also, it is important for survivors to know that there does not need to be physical evidence of the assault in order for the university to provide resources for survivors, which is important because not having enough evidence was a barrier to reporting the assault to law enforcement (Cohn et al., 2013). There is a need to examine factors that are associated with sexual assault survivors' decisions regarding reporting the assault to university officials. This may allow universities to enhance their education programs to increase survivors' understanding of the value and consequences to reporting on campus and/or to implement policies that could reduce barriers survivors face when making the decision to report the sexual assault, which could aid in sexual assault survivors receiving resources.

The purpose of this thesis is to examine factors that are associated with the survivor formally reporting the assault to university officials, informally reporting the assault, or choosing not to tell anyone about the assault. This is important because if a survivor formally reports the assault, they may gain access to needed resources. It is also important to examine factors that might influence the survivor's decision to informally report the assault, such as telling friends or family members, so that the survivor could gain social support. Studies have found that approximately two-thirds of recipients of a rape disclosure encourage the survivor to make a formal report, and survivors who are encouraged to report the assault are significantly more likely to report the assault to the police (Paul, Zinzow, McCauley, Kilpatrick, & Resnick, 2014; Paul, Walsh, McCauley, Ruggiero, Resnick, & Kilpatrick, 2013). This suggests that informal

reports may lead to survivors formally reporting the sexual assault to the university. This study will explore if the type of assault, whether or not the survivor had been drinking at the time of assault, the survivor's relationship to the perpetrator, and whether or not the survivor has received training regarding sexual assault impacts to whom the survivor reports the assault. This study will also look at the survivor's perception of college climate, (i.e., how valued the student feels at the university), as a moderating variable in order to see how much the campus environment influences reporting behaviors.

Chapter 2 - Background

Theoretical Framework

This study seeks to adapt Greenberg and Ruback's (1992) multi-staged model of victim decision-making to enhance our understanding of victims' decisions regarding seeking help. According to Greenberg and Ruback's (1992) victim decision-making model, the first step in the decision making process is for the survivor to determine whether or not a crime has been committed. The next step is for the survivor to determine the seriousness of the crime that has been committed. The final stage of Greenberg and Ruback's decision making model is for the survivor to decide whether or not to take action. Menar (2005) has critiqued Greenberg and Ruback's model, stating that it does not incorporate the importance of the environment in which the survivor lives, and how that influences his/her decision to report a sexual assault. For example, if the survivor decides to report, would there be any possible social repercussions due to being in an unsupportive environment? This thesis seeks to adapt this model to understand the importance of additional contextual factors in the decision-making process. In addition to factors included in Greenberg and Ruback's model, this study includes contextual factors, such as the survivor's perception of the campus environment in which the survivor lives, as well as how the survivor believes the report would be handled by the university.

The process that victims of sexual assault go through in deciding whether or not to report a sexual assault to the university or to anyone is complex. In this study I begin by examining factors in Greenberg and Ruback's model, such as the type of act perpetrated against the survivor, whether or not alcohol was involved, the survivor's relationship to the perpetrator, and whether the survivor has received training on sexual assault. I believe that these factors influence whether or not the survivor perceives the assault to be a serious crime. Additionally,

the model will be adapted in order to look at the environment in which the survivor lives, and how that influences reporting behaviors. In order to gain a more complete understanding of reporting behaviors of sexual assault survivors, it is important to examine multiple contexts that may impact a survivor's decision on whether or not to report the assault to university officials.

Type of Sexual Assault and Reporting Behaviors

Fisher and colleagues (2003) found that sexual assault survivors do not always report to the police because they view certain acts (i.e., penetration) as more reportable than other acts of sexual assault. Perhaps the number one reason survivors do not report the sexual assault to police is because they believe that the assault was not serious enough to report (Krebs et al., 2007; Thompson et al., 2007; Weiss, 2011). Research has found that survivors were less likely to label their assault as such if the assault did not adhere to their definition of what constitutes a "real" rape (Cleere & Lynn, 2013; Dumont, Miller, & Myhr, 2003; Gavey, 2005). If we are examining the first step in Greenberg and Ruback's (1992) decision-making model, the type of assault that was perpetrated would have an important impact on the first step, which is whether or not they decide that a crime has been committed against them.

Alcohol Use and Reporting Behaviors

Alcohol use is a risk marker for the occurrence of a sexual assault. According to previous research, approximately half of sexual assault survivors were under the influence of alcohol at the time of the assault (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Ullman, 2003). Research examining sexual assaults in college populations have found that 72% of survivors reported being intoxicated during the assault (Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). These facts should not suggest that the survivor should bear responsibility for the sexual assault,

but highlight that alcohol use is frequently involved in sexual assaults and should be examined thoroughly in its association with reporting the sexual assault.

There is often a college party culture on university campuses that normalizes partying, drinking, and sexual activity (Armstrong, Hamilton, & Sweeny, 2006). When there are so many sexual assaults on college campuses that involve alcohol use, it can be argued that the normalization of sexual encounters and alcohol may make it more difficult for survivor to make a decision on whether or not a crime has been committed, thus lowering their likelihood of reporting the assault if they were under the influence of alcohol during the time of the assault.

Lastly, it has been found that survivors who were intoxicated at the time of the assault experience more self-blame and more negative reactions from those to whom they disclose the assault than survivors who were not intoxicated at the time of the assault (Sims, Noel, & Maisto, 2007; Ullman & Najdowski, 2010). The victim-blaming mentality that accompanies alcohol use during the time of the assault may also play a role in the survivor's decision to formally report his/her sexual assault, or disclose the assault to someone that they know.

Perpetrator and Reporting Behaviors

A recent national study has found that the majority of sexual assault survivors report that the perpetrator of the sexual assault is someone they know (Cantor et al., 2015). Despite the high level of sexual assault perpetrated by offenders known to the survivor, Felson and Paul-Philippe (2005) found that sexual assault survivors were most likely to report the assault to the police if the perpetrator was a stranger. Because we know that it is more likely that the perpetrator is someone known to the survivor, such as a dating partner or a friend, it is important to examine whether or not the decision to report to the university or to others is impacted by whether or not the perpetrator was previously known by the victim, and in what way the victim knew the

perpetrator. When looking at the first step of Greenberg and Ruback's model, deciding whether or not a crime has been committed, it may be more difficult to determine that someone known to the survivor could be capable of committing such a crime. It may also contribute to the survivor not viewing the crime as a serious crime, since someone they may have been close to committed the crime. It could be that the more familiar the survivor is with the perpetrator, such as a dating partner compared to an acquaintance, the less likely they would formally, or informally, report the assault.

Training and Reporting Behaviors

The belief that the sexual assault was not serious enough to report or the fact that the victim did not acknowledge the assault as an assault is another common reason given for not reporting the assault to the police (Cohn et al., 2013; Fisher et al., 2003). This suggests that many sexual assault survivors may be unsure of what constitutes an assault. For this reason, it is important to examine whether or not sexual assault survivors had received any education or training regarding sexual assault on college campuses. Anderson and Whiston (2005) conducted a meta-analysis on sexual assault education programs and their overall effectiveness. This study found receiving sexual assault education programming was significantly associated with not accepting rape myths, behavioral intent to report rape, and knowledge about what constitutes rape. This might suggest that survivors who have received sexual assault training could be more likely to recognize the assault as a crime that has been committed, which may impact the survivor's decision to report the assault.

Environment and Reporting Behaviors

Research that examines reasons why sexual assault survivors do not report the assault to the police have found that one of the most frequently cited reasons for not reporting to the police

was the possible repercussions of reporting (e.g. not being believed, being blamed for the incident, being re-traumatized by the reporting process; Felson & Paul-Philippe, 2005; Thompson, Sitterle, Clay, & Kingree, 2007; Vonpi, 2006). This suggests that if the survivor does not anticipate that the environment in which she will be reporting the sexual assault will be supportive, the survivor is less likely to report the assault. These findings about barriers to reporting to police could possibly be translated to barriers impacting survivors' decisions to report assaults to university officials. Research on sexual assault prevention has highlighted the importance of addressing the community climate on college campuses as a means of reducing sexual assaults on college campuses (Banyard, Plante, & Moynihan, 2004). Creating a campus culture that promotes a feeling of inclusion and supports sexual assault survivors may have an impact on the reporting behaviors of sexual assault survivors on college campuses.

The Present Study

The primary goal of this thesis was to examine factors that may influence sexual assault survivors' decisions to formally report their sexual assaults on college campuses. This goal was addressed by using secondary data analysis to examine responses from college students who had been sexually assaulted since entering their university. The responses came from an online survey given to students regarding sexual violence, intimate partner violence, and overall campus climate. This study examined the type of sexual assault that was perpetrated against the survivor, whether or not the survivor was drinking alcohol at the time of the assault, the survivor's relationship to the perpetrator, whether or not the survivor received sexual assault training, and the survivor's perception of campus climate. These factors were chosen due to their potential influence on whether or not the survivor identifies that a crime has been committed, as well as if the severity of the crime was reportable. These variables were examined to see if they were

associated with who the student told about their assault, which was grouped into three categories: formal reporting, informal reporting, or telling no one. This study examined if the survivor's belief that the university would handle a sexual assault report appropriately moderated to whom survivors reported their sexual assault. This research provides new information on the context in which the decision to report was made.

The first research question that this study examined was whether various individual and incident factors identified in the literature: 1) the type of sexual assault that occurred [i.e., forced touching or kissing of a sexual nature, penetration by a finger or an object, oral sex, vaginal sex, or anal sex]; 2) whether or not the survivor was drinking alcohol at the time of the assault; 3) the survivor's relationship to the perpetrator [i.e., a stranger, an acquaintance, a friend, or a dating partner]; 4) whether or not the survivor received training regarding campus policies and procedures surrounding sexual assault, and 5) the survivor's perception of the campus climate were associated with whether or not the survivor formally reported the sexual assault, informally reported the sexual assault, or did not tell anyone about the sexual assault. The second research question that this study examined was if the survivor's belief that the university would handle the report appropriately moderates the relationship between individual and incident factors and the likelihood of the survivor formally reporting, informally reporting, or telling no one about the assault.

Chapter 3 - Method

Sample and Procedures

An online survey was utilized in order to collect data from students at a large southern university. An email was sent directly to every student at the university, giving all students an equal chance to take the online survey. The students were given the chance to win a few monetary prizes, ranging from \$25 dollars to \$100 for completing the survey. A total of 2,482 surveys were completed. This particular sample consists of only the students who reported that they had been sexually assaulted since enrolling in the university. This resulted in a sample of 269 students. However, three participants were dropped due to reporting on multiple assaults, rather than the most recent. The final sample consisted of 266 individuals.

The average age of participants was 21.36 (SD = 3.34). There were 238 females, 26 males, and 2 transgender individuals in the sample. The majority of the sample was seniors (n = 101), followed by juniors (n = 52), sophomores (n = 50), freshman (n = 37), and graduate students (n = 25). The sample consisted of 210 individuals identifying as heterosexual, 29 identifying as bisexual, 11 as gay or lesbian, eight as questioning, and seven reporting "other." The majority of the sample was White (n = 224), followed by Black or African American (n = 22), "Other" (n = 17), American Indian or Alaska Native (n = 14), Asian (n = 11), and Middle Eastern or Arabic (n = 3). There were 69 students who identified their ethnicity as Hispanic or Latino.

Measures

What Act was Perpetrated? If a respondent reported that they had experienced any sort of nonconsensual or unwanted sexual act since coming to the university, they were asked to report all of the specific types of sexual assault they experienced in the most recent incidence.

Definitions were given for each type of sexual assault. Respondents could choose all that

applied. They were given the options of forced touching of a sexual nature, oral sex, anal sex, vaginal or anal penetration with a finger or object, vaginal intercourse, or no response, which was considered missing data. In the study, anal sex and vaginal intercourse were combined due to low reports of anal sex. These variables were dummy coded as $1 = this \ did \ happen$ or $0 = this \ did \ not \ happen$. Forced touching of a sexual nature was used as the reference category.

Was Alcohol Involved During the Assault? If a respondent reported that they had experienced any unwanted sexual act since enrolling at the university, they were also asked if the assault had involved their own use of alcohol at the time. Respondents were able to choose whether alcohol had been involved or if alcohol was not involved during the assault. This variable was dummy coded as 1 = I was under the influence of alcohol during the assault or 0 = I was not under the influence of alcohol during the assault.

Who Perpetrated the Assault? The respondents were asked who sexually assaulted them. Respondents were allowed to pick all that applied, and their options consisted of a stranger, a family member, an acquaintance, a coworker, a teacher, school personnel, non-romantic friend, casual or first date, romantic partner, ex-romantic partner, other, or no response. These answers were then categorized into five distinct groupings for the current study. The group "stranger" consisted of the response "a stranger." The group "acquaintance" consisted of the answer "an acquaintance." The group "friend" consisted of a "non-romantic friend." The group "dating partner" included a casual or first date, a romantic partner, or an ex-romantic partner. All of these variables were then dummy coded as 1 = this was the perpetrator or 0 = this was not the perpetrator. The group "stranger" was used as the reference category.

Training. In order to find out whether or not the participants had received any formal training about campus policy and procedures regarding sexual assault, participants were asked

"Have you received training in policies and procedures regarding incidents of sexual assault (e.g., what is defined as sexual assault, how to report an incident, confidential resources, procedures for investigating)?" This variable was dummy coded as $1 = did\ receive\ training$ or $0 = did\ not\ receive\ training$.

University Climate. In order to assess how the participants felt about the overall climate of the university, they were asked nine questions about their overall experience at the university. They were asked to indicate their level of agreement to statements on a 4-point Likert scale that ranged from 1 = strongly disagree to 4 = strongly agree. Examples of questions asked included: "I feel like I am a part of the university," "I think faculty are genuinely concerned about my welfare," and "I feel valued in the classroom/learning environment." The scores of the nine questions were averaged to create a mean score, where higher numbers indicated a more positive perception of campus climate. The internal consistency of this scale was acceptable ($\alpha = 0.85$).

How Report would be Handled. In order to assess whether or not the survivors believed the university would handle a sexual assault report appropriately, they were asked eight questions about how they believed the university would handle the report. They were asked how much they agreed with the statements, rating them each on a 4-point Likert scale that ranged from 1 = strongly disagree to 4 = strongly agree. Some examples of the questions on this scale include: "The university would take the report seriously," "the university would support the person making the report," and "the university would take corrective action against the offender." The eight questions were averaged to create a mean score, where higher numbers indicated a stronger belief that the university would handle the report appropriately. The internal consistency of this scale was acceptable ($\alpha = 0.90$).

To Whom they Reported the Assault. The participants were asked who they told about the incident, and were able to choose all that applied. The options were no one, roommate, close friend other than roommate, parent or guardian, other family member, counselor at the university, faculty or staff, residence hall staff, police, romantic partner, campus sexual assault advocate, other, and no response. These responses were then coded into three larger groups: no one, formal report, and informal report. The group "no one" consisted of the one answer of telling no one. The group "formal report" consisted of reporting to a counselor at the university, faculty or staff, residence hall staff, police, and/or campus sexual assault advocate. The group "informal report" consisted of telling a roommate, close friend other than roommate, parent or guardian, other family member, or romantic partner. These variables were dummy coded as 0 = this is not who I told or 1 = this is who I told. Telling no one was used as the reference group.

Demographic variables. In the analysis, gender, sexual orientation, and race were used as control variables. For gender, respondents were asked if they identified as male, female, transgender, or other. There was also an option of "no response" which was treated as missing data. These variables were dummy coded where 1 = female and 0 = male.

For racial and ethnic minority status, respondents were given the option to select all that applied that described their race. They were given the options of American Indian or Alaska Native, Asian, Black or African American, Middle Eastern or Arabic, Native Hawaiian or Other Pacific Islander, White, "other," and giving no response. The students were also asked their ethnicity, and were given the options of Hispanic or Latino or not Hispanic or Latino. Those of minority races or ethnicities were combined due to low numbers in each category. The two groups were dummy coded as $1 = racial \ or \ ethnic \ minority$ and $0 = non-Hispanic \ white$.

For sexual orientation, respondents were given the option of choosing bisexual, gay, heterosexual, lesbian, questioning, "other," or giving no response. In the analysis, due to sample size, heterosexual was compared to bisexual, other, questioning, lesbian, and gay. These two groupings were dummy coded as 1 = sexual minority, or 0 = heterosexual.

Analysis Plan

A multinomial regression was run using SPSS 22 software in order to determine if the following predictors (what type of assault was perpetrated, if the survivor was under the influence of alcohol at the time of the assault, the survivor's relationship to the perpetrator, if the survivor had received training about the university's policies and procedures around sexual assault, and the survivor's perception of a positive campus climate) were significantly associated with the odds the sexual assault survivor formally reported the assault, informally reported the assault, or told no one about the assault. The participant's belief that the university would handle the assault appropriately was used as a moderating variable. Race/ethnicity, gender, and sexual orientation were used as control variables. In this data, truly missing data and "no response" answers were treated as missing data. Missing data was handled by using pairwise deletion. The university climate variable, the moderator, was standardized and interaction terms computed. Significant interaction terms were examined by plotting interaction figures to examine one standard deviation above and one standard deviation below the mean on university climate in relation to the categories tested with it.

Chapter 4 - Results and Discussion

When examining who perpetrated the assault, 21.1% of participants reported that a stranger assaulted them (n = 56), 26.7% reported an acquaintance (n = 71), 19.5% reported a friend (n = 52), and 26.3% reported a dating partner (n = 70); See Table 1). When looking at the act that was perpetrated against the survivors, 73.3% reported experiencing forced touching of a sexual nature (n = 195), 18.4% reported oral sex (n = 49), 24.8% reported vaginal or anal penetration with a finger or object (n = 66), 39.8% reported vaginal intercourse (n = 106), 6.0% reported anal sex (n = 16), and three respondents chose not to respond. When asked if the sexual assault involved the survivor's use of alcohol, 51.9% reported that they had been drinking alcohol during the incident (n = 137). When asked about whether or not they received training regarding sexual assault on campus, 36.8% of the participants reported that they had received training (n = 98). When asked who the respondents told, 22.3% told no one about the incident (n = 98). = 59), 11.7% formally reported the incident (n = 31), and 75.4% informally reported the incident (n = 174). The overall perception of campus climate was generally positive (M = 3.00, SD =0.52). The belief that the university would handle the report appropriately was generally high (M = 2.91, SD = 0.71).

Table 1: Survivor Reports of Perpetrator, Training Received, Type of Assault, If Survivor was Drinking at the Time of the Assault, Who Assault was Reported to, Perceived Campus Climate, and Belief that University would Handle Report Appropriately: Descriptive Statistics (n = 266)

Variables	M or %	SD	Range	α
Stranger Perpetrator	21.1%			
Acquaintance Perpetrator	26.7%			
Friend Perpetrator	19.5%			
Dating Perpetrator	26.3%			
Training ^a	36.8%			
Sexual Touching	73.3%			
Penetration by Finger or Object	24.8%			
Oral Sex	18.4%			
Vaginal Intercourse	39.8%			
Anal Sex	6.0%			
Alcohol Use	51.9%			
Formal Report	11.7%			
Informal Report	65.9%			
Telling No One	22.3%			
Campus Climate ^b	3.00	0.52	1-4	0.85
Belief in How Report Would be	2.01	0.71	1 4	0.00
Handled ^c	2.91	0.71	1-4	0.90

Note: ^a Individual received training on the university's policies and procedures on sexual assault. ^b is the perception of the overall climate of the university, where 1 = negative climate and 4 = positive climate. ^c is the belief in how the university would handle the report, where 1 = negative belief and 4 = positive belief.

Formal Reporting

Several of the predictors were significantly associated with the odds of making no report, an informal report, or a formal report about the sexual assault (See Table 2). If the student had received training on the university's policies and procedures regarding sexual assault, they were more likely to formally report the assault (b = 2.09, p < .01, OR = 8.09). When looking at the odds ratio (OR), this number shows that students who received training were 8.09 times more likely to formally report the assault relative to those who have not received training. Participants were also more likely to formally report, compared to informally reporting or telling no one, if the sexual assault involved vaginal or anal sex (b = 1.94, p < .05, OR = 6.97) compared to if the sexual assault was forced touching or kissing of a sexual nature. Students were also more likely to formally report the assault if they had a positive perception of the overall campus climate (b =1.42, p = .001, OR = 4.16). This suggests that students who had a positive perception of the overall climate were 4.16 times more likely to formally report the assault relative to those who had a negative perception of the overall campus climate. Students were *less* likely to formally report the assault if the perpetrator was an acquaintance (b = -3.12, p = .001, OR = 0.04), a friend (b = -2.86, p < .05, OR = 0.06), or a dating partner (b = -3.29, p < .001, OR = 0.04), as compared to the perpetrator being a stranger. When looking at the odds ratio (OR), this number shows that if the perpetrator was a dating partner, survivors were 96% less likely to formally report the assault. Lastly, students were less likely to formally report the assault if they were racial or ethnic minorities (b = -1.56, p < .05, OR = 0.21). This suggests that survivors who were racial or ethnic minorities were 79% less likely to formally report than survivors who were non-Hispanic white.

Table 2: Summary of Logistic Regressions on Formal and Informal Reporting of Sexual Assaults on College Campus (n=238)

on College Campus (n= 238)	Formal Reporting			Infor	Informal Reporting			
Variable	b	SE b	OR	b	SE b	OR		
Acquaintance Perpetrator ^a	-3.12***	0.98	0.04	-0.32	0.52	0.73		
Friend Perpetrator ^b	-2.86*	1.31	0.06	1.28	0.72	3.58		
Dating Perpetrator ^c	-3.29*	0.92	0.04	-1.15*	0.52	0.32		
Alcohol Use ^d	-1.33	0.79	0.27	0.64	0.41	1.90		
Training ^e	2.09**	0.72	8.09	0.41	0.41	1.51		
Vaginal or Anal Sex ^f	1.94*	0.79	6.97	-0.29	0.42	0.75		
Oral Sex ^g	1.28	0.85	3.59	0.31	0.54	1.36		
Penetration by Finger or Object ^h	0.37*	0.80	1.44	0.30	0.44	1.35		
Campus Climate ⁱ	1.42***	0.44	4.16	0.00	0.22	1.00		
University Response ^j	-1.48	0.79	0.23	01	0.52	0.99		
Female ^k	-0.37	1.16	0.69	-0.41	0.68	0.66		
Racial/Ethnic Minority ^l	-1.56*	0.68	0.21	-0.81*	0.37	0.44		
$LGBT^{\mathrm{m}}$	-0.87	0.92	0.42	-0.28	0.45	0.75		
Acquaintance Perpetrator × University Response	-1.23	0.87	0.29	0.37	0.60	1.45		
Friend Perpetrator × University Response	-0.33	0.94	0.72	0.74	0.65	2.10		
Dating Perpetrator × University Response	0.82	0.87	2.27	0.72	0.58	2.06		
Alcohol Use × University Response	0.50	0.72	1.64	0.73	0.44	2.08		
Training × University Response	0.28	0.65	1.32	0.14	0.41	1.01		
Vaginal or Anal Penetration × University Response	0.70	0.75	2.01	-1.06*	0.44	0.35		
Oral Sex × University Response	-0.69	0.82	0.50	-0.60	0.55	0.55		
Penetration by Finger or	0.27	0.07	1 45	0.72	0.53	0.02		
Object × University Response	0.37	0.85	1.45	-0.72	0.52	0.93		
Campus Climate × University Response	0.67*	0.31	1.95	-0.15	0.20	0.99		
R^2	0.45							

Note: a 1 = acquaintance perpetrator, 0 = acquaintance not the perpetrator. b 1 = friend perpetrator, 0 = friend not the perpetrator. c 1 = dating partner perpetrator, 0 = dating partner

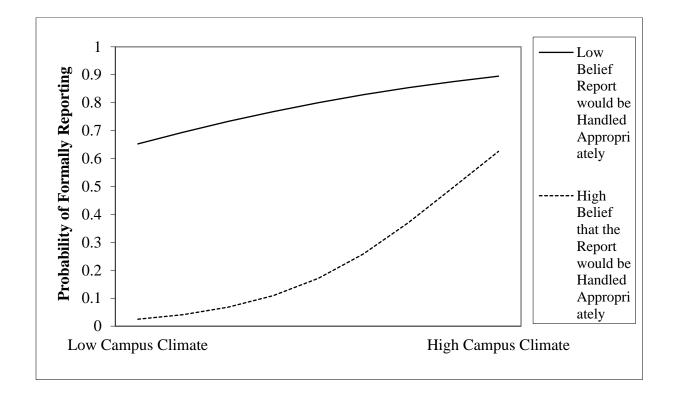
not the perpetrator. $^{\rm d}$ 1 = Survivor under the influence of alcohol during assault, 0 = Survivor not under the influence of alcohol during the assault. $^{\rm e}$ 1 = received training, 0 = did not receive training. $^{\rm f}$ 1 = assault was anal or vaginal sex, 0 = assault was not anal or vaginal sex. $^{\rm g}$ 1 = assault was oral sex, 0 = assault was not oral sex. $^{\rm h}$ 1 = assault was penetration by finger or object, 0 = assault was not penetration by finger or object. $^{\rm i}$ 1 = strongly disagree, 0 = disagree, 0 = assault was not penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was not penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by finger or object. 0 = assault was penetration by fin

The interaction effects were tested in order to see if the students' belief that the report would be handled appropriately moderated any of these associations, which it did in one case. Overall belief that the report would be handled appropriately was a significant moderator of the association between the survivor's perception of university climate and the sexual assault survivor's likelihood to formally report the assault (b = 0.67, p < .05, OR = 1.95; See Figure 1). This means that survivors were significantly more likely to formally report the sexual assault if they believed that the report would be handled appropriately and perceived the overall campus climate as positive, compared to if survivors felt the report would be handled appropriately but perceived the overall campus climate as negative.

Informal Reporting

The participants were less likely to informally report their assault, as opposed to telling no one or formally reporting, if the perpetrator was in a dating relationship with the survivor, relative to if the perpetrator was a stranger (b = -1.15, p < .05, OR = 0.32). If the survivor was a racial minority, they were less likely to informally report the assault (b = -0.81, p < .05, OR = 0.44). This states that survivors who were racial or ethnic minorities were 66% less likely to informally report the assault relative to survivors who were non-Hispanic white. Survivors were also less likely to informally report the assault if they believed the university would handle the report appropriately and the assault was anal or vaginal sex (b = -1.06, p < .05, OR = 0.35). The model explained 45% of the variance in reporting behaviors ($R^2 = 0.45$).

Figure 1: Interaction Effects of Positive Campus Climate Perceptions and Belief that Report would be Handled Appropriately by the University On Formally Reporting the Assault (n = 238)



Discussion

This study examined factors (i.e., the type of sexual assault, whether or not the survivor received training, whether or not the survivor was drinking alcohol at the time of the assault, the survivor's relationship to the perpetrator, the survivor's perception of the university climate, and the survivor's belief that the report would be handled appropriately) and their influence on if the sexual assault survivor made a formal report of the sexual assault, an informal report of the sexual assault, or if they did not tell anyone about the sexual assault. Participants were more likely to formally report their sexual assault if they had received training on university policies and procedures surrounding sexual assault, and if they perceived the overall campus climate as positive. They were also more likely to formally report the assault if the sexual assault was vaginal or anal sex. Survivors were less likely to formally report the sexual assault if the perpetrator was an acquaintance, friend, or romantic partner. If the survivor was a racial or ethnic minority, they were also less likely formally report the assault. The participants' belief that the university would handle the report appropriately in conjunction with having a positive perception of campus climate increased the likelihood of formally reporting.

When examining factors associated with sexual assault survivors informally reporting their sexual assault, the study found that survivors were less likely to informally report the sexual assault if a romantic partner was the perpetrator of the assault. Survivors who were ethnic or racial minorities were less likely to informally report the assault. Lastly, if the survivor held the belief that the university would handle the report properly, and the assault involved anal or vaginal sex, they were less likely to informally report the assault.

Our results provide support for the first step of Greenberg and Ruback's (1992) multistaged model of victim decision making on seeking help, or in this case reporting the assault, which is to determine whether or not a crime has been committed. We found that survivors were more likely to formally report the assault if the assault involved vaginal or anal sex. This is congruent with previous research that has found that survivors are less likely to label their assault as a sexual assault if it did not connect with what their definition of a "real" rape (Cleere & Lynn, 2013; Dumont, Miller, & Myhr, 2003; Gavey, 2005). This suggests that when an assault does not look like a "real" rape, it is more difficult for the survivor to determine whether or not a crime has been committed. This may explain why survivors were more likely to report the assault if it involved vaginal or anal sex. This suggests that education could be helpful in defining sexual assault, so that survivors can identify that a crime has been committed, which may be useful in increasing reporting. If students believe that only penetrative acts are reportable, it may be helpful for universities to educate students that there are other acts that are considered to be sexual assault and survivors can report these types of assault in order to receive services that can help them recover from the assault.

Our results also provide support for Greenberg and Ruback's (1992) first step in their victim decision-making model, in that we also found that training increased the likelihood of formally reporting the sexual assault. Anderson and Whiston (2005) found that sexual assault trainings are linked to students being less likely to believe in rape myths and an increased knowledge about what constitutes as rape. Our results suggest that the education in sexual assault trainings can help survivors to determine that a crime has been committed, which can increase rates of reporting sexual assault. When looking at the second step in the victim's decision making model, where the victim determines the seriousness of the crime, our results suggest that the training could also help the survivor determine the seriousness of the crime. Training focusing on what constitutes a rape, and debunking rape myths, may educate survivors on the

severity of the crime of sexual assault. It is necessary for students to understand what constitutes a sexual assault, as well as how serious the crime of sexual assault truly is.

We also found that survivors are less likely to formally report a sexual assault if the perpetrator was an acquaintance, friend, or dating partner, and less likely to informally report the assault if the perpetrator was a dating partner. This is in line with previous research that has found that survivors were most likely to report the assault if the perpetrator was a stranger (Felson & Paul-Philippe, 2005). Who the perpetrator of the assault was could impact all three stages of Greenberg and Ruback's victim decision-making model. It may be difficult for survivors to determine that a crime was committed if the perpetrator was a friend or dating partner. If the perpetrator was someone the survivor knows, it may also make it more difficult to determine the seriousness of the crime. The final stage of the victim decision-making model is the act to make the decision whether or not to report. If the perpetrator is someone the survivor knows, it may make it more difficult to make the decision to report, as they may fear repercussions from the perpetrator, fear repercussions in their social circle, or they may not want to get the perpetrator in trouble. It is important for students to understand that a sexual assault can occur between friends and dating partners, and to understand that sexual assault between individuals who know one another is just as serious of a crime as a sexual assault perpetrated by a stranger.

Additionally we found that students who were racial or ethnic minorities were less likely to formally or informally report their assault, which means that survivors who are racial or ethnic minorities are more likely to tell no one that they were sexually assaulted, which limits their access to resources and social support. Racial and ethnic minorities frequently experience racism and discrimination while attending their university (Solórzano, Ceja, & Yosso, 2000; Trevino &

Ernst, 2014). The experiences that these students have while attending their university could lead racial and ethnic minority students to feel unsupported by the university and fellow students. This lack of support for racial and ethnic minority students could have a notable impact on their decision to report the sexual assault to the university or to their peers. This suggests that universities should provide increased public support of racial and ethnic minority students who are sexually assaulted.

Our results also provide support for adding context to Greenberg and Ruback's victim decision-making model. When examining environmental factors associated with the likelihood of reporting the sexual assault, we found that the survivor's perception of the general campus climate increased the likelihood of formally reporting the assault. This could impact the third step of the victim decision-making model. If a survivor feels supported and cared about at their university, it may make it easier to go to the university to report the assault. It may be important for universities to make a greater effort to ensure that their students believe that they are valued, cared about, and feel as though they are a part of the university. This could include efforts to engage students to feel as though they are a part of the university as a whole, as well as encouraging faculty members to create positive relationships with students that attend the university.

We also found that if the survivor believes that the university will handle the assault appropriately and if the survivor has a positive perception of campus climate, they are more likely to formally report the assault. This suggests that it is important that the student feels supported at the university, but it is also important that the survivor has faith that the university will respond to the report appropriately Increased public support for survivors by universities, as

well as messages that state that reports of sexual assault will be taken seriously by the university, may increase formal reporting of sexual assault on college campuses.

Limitations and Suggestions for Future Research

One limitation of this study is the sample size. Another limitation is the fact that the sample comes from one university. Having a larger sample from multiple universities would make the results more generalizable. Although it was found that the training the survivors had received in this study had a significant relationship with formally reporting the assault, different universities around the country may have different approaches to training, and the results might not translate among all college universities. Having a larger sample of students from multiple universities would show whether or not training in general, or if the training given at this specific university, yields these results. Another limitation regarding training would be that we are unable to determine the specific type of training survivors received, or if they had received training before or after the sexual assault.

Another limitation to the study is the use of secondary data. We were not able to ask questions that directly tested Greenberg and Ruback's decicion-making model. Since the data was cross-sectional, we were also not able to determine whether or not the survivor's perception of campus climate or belief in how the university would handle the assault were the same prior to making the decision to report the assault. It is possible that the survivors' experiences surrounding the sexual assault impacted their perception of the overall campus climate and their belief in how the assault would be handled by the university.

Future research efforts might also compare effectiveness of various types of trainings and also use mixed methods to interview survivors regarding to whom they chose to report the assault. Our results found that survivors who were ethnic or racial minorities were less likely to

formally or informally report their assault relative to survivors who were non-Hispanic white. This suggests that there needs to be a focus on examining the experiences of racial and ethnic minority students on college campuses and how this impacts their decision to report a sexual assault.

Conclusion

We identified several predictors of the odds of who will and will not report sexual assault. This is important because when formally reporting the assault to the university, the students can obtain resources, such as counseling services and victim advocacy services, to help them heal from the trauma of sexual assault. When informally reporting, the students can receive social support from those close to them. Results from this study suggest that there are actions in which universities can take to increase reporting behaviors. These suggestions include increasing education about what constitutes as a sexual assault, as well as the seriousness of the crime of sexual assault. Results from this study also highlight the importance of sexual assault training. One takeaway from this study is the importance of the overall campus climate on survivors' decisions to report the sexual assault or not. Universities can and should take action to publicly support survivors of sexual assault, make it clear that reports of sexual assault will be handled appropriately, as well as provide support to ethnic and racial minority survivors on campus. Universities should to work towards creating a campus climate that supports survivors of sexual assault.

Chapter 5 - References

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